RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/727,145
Source: IFW0
Date Processed by STIC: 9/22/06

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RAW SEQUENCE LISTING DATE: 09/22/2006
PATENT APPLICATION: **US/10/727,145** TIME: 11:13:33

Input Set : **F:\031065SeqListing.txt**
Output Set: **N:\CRF4\09222006\J727145.raw**

<110> APPLICANT: Animal Technology Institute Taiwan
Ching-Fu, Tu
Chi-Kai, Yang
Chich-Sheng, Lin
Chon-Ho, Yen
I-Chung, Chen
Shinn-Chih, Wu
Yu-Ling, Sun
Ming-Shing, Liu
Ping-Cheng, Yang
<120> TITLE OF INVENTION: Expression Vector For Hirudin And Transformed Cells And Transgenic Animals Containing Said Vector
<130> FILE REFERENCE: MBHB-03-1065
<140> CURRENT APPLICATION NUMBER: 10/727,145
C--> **<141> CURRENT FILING DATE: 2003-12-03**
<150> PRIOR APPLICATION NUMBER: 10/053,641
<151> PRIOR FILING DATE: 2002-01-18
<160> NUMBER OF SEQ ID NOS: 21
<170> SOFTWARE: PatentIn version 3.3
<210> SEQ ID NO: 1
<211> LENGTH: 104
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Single-stranded DNA fragments Hi-AF designed from the hirudin gene.
<400> SEQUENCE: 1
gatcctttat ggttgtttac actgactgca ctgaatccgg tcagaacctg tgcctgtgcg 60
aaggctctaa cgtttgcggc cagggcaaca aatgcatcct gggc 104
<210> SEQ ID NO: 2
<211> LENGTH: 107
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Single-stranded DNA fragments Hi-AR designed from the hirudin gene.
<400> SEQUENCE: 2
ctctagagcc caggatgcat ttgttgccct ggccgcaaac gttagagcct tcgcacaggc 60
acaggttctg accggattca gtgcagtcag tgtaaacaac cataaag 107
<210> SEQ ID NO: 3
<211> LENGTH: 111
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence

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64 <220> FEATURE:
65 <223> OTHER INFORMATION: Single-stranded DNA fragments Hi-BF designed from the hirudin
66 gene.
68 <400> SEQUENCE: 3
69 tctagaggcg aaaaaaatca atgcgttact ggcgaaggta ctccgaaacc gcagtctcac 60
71 aacgacggcg actttgaaga aatcccggaa gaatacctgc aataataggg c 111
74 <210> SEQ ID NO: 4
75 <211> LENGTH: 108
76 <212> TYPE: DNA
77 <213> ORGANISM: Artificial Sequence
79 <220> FEATURE:
80 <223> OTHER INFORMATION: Single-stranded DNA fragments Hi-BR designed from the hirudin
81 gene.
83 <400> SEQUENCE: 4
84 ggccgcccta ttattgcagg tattcttccg ggatttcttc aaagtcgccg tcgttgtgag 60
86 actgcggttt cggagtacct tcgccagtaa cgcattgatt tttttcgc 108
89 <210> SEQ ID NO: 5
90 <211> LENGTH: 33
91 <212> TYPE: DNA
92 <213> ORGANISM: Artificial Sequence
94 <220> FEATURE:
95 <223> OTHER INFORMATION: Primer Hi-PCR-AF designed from the hirudin gene.
97 <400> SEQUENCE: 5
98 tcgggatcct ttatggttgt ttacactgac tgc 33
101 <210> SEQ ID NO: 6
102 <211> LENGTH: 31
103 <212> TYPE: DNA
104 <213> ORGANISM: Artificial Sequence
106 <220> FEATURE:
107 <223> OTHER INFORMATION: Primer Hi-PCR-AR designed from the hirudin gene.
109 <400> SEQUENCE: 6
110 gcctctagag cccaggatgc atttgttgcc c 31
113 <210> SEQ ID NO: 7
114 <211> LENGTH: 38
115 <212> TYPE: DNA
116 <213> ORGANISM: Artificial Sequence
118 <220> FEATURE:
119 <223> OTHER INFORMATION: Primer Hi-PCR-BF designed from the hirudin gene.
121 <400> SEQUENCE: 7
122 ggctctagag gcgaaaaaaa tcaatgcgtt actggcga 38
125 <210> SEQ ID NO: 8
126 <211> LENGTH: 32
127 <212> TYPE: DNA
128 <213> ORGANISM: Artificial Sequence
130 <220> FEATURE:
131 <223> OTHER INFORMATION: Primer Hi-PCR-BR designed from the hirudin gene.
133 <400> SEQUENCE: 8
134 catgcggccg ccctattatt gcaggtattc tt 32
137 <210> SEQ ID NO: 9

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<211> LENGTH: 45
<212> TYPE: DNA
<213> ORGANISM: Capra hircus
<220> FEATURE:
<221> NAME/KEY: misc_feature
<223> OTHER INFORMATION: Signal sequence from a goat beta-casein.
<400> SEQUENCE: 9
atgaaggtcc tcatccttgc ctgtctggtg gctctggcca ttgca 45
<210> SEQ ID NO: 10
<211> LENGTH: 15
<212> TYPE: PRT
<213> ORGANISM: Capra hircus
<220> FEATURE:
<221> NAME/KEY: MISC_FEATURE
<223> OTHER INFORMATION: Signal sequence from a goat beta-casein.
<400> SEQUENCE: 10
Met Lys Val Leu Ile Leu Ala Cys Leu Val Ala Leu Ala Ile Ala
1 5 10 15
<210> SEQ ID NO: 11
<211> LENGTH: 34
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer Hir1st5' for the adding the signal sequence from a goat
beta-casein to the 5'-terminal of the hirudin gene.
<400> SEQUENCE: 11
tggctctggc cattgcagtt gtttacaccg actg 34
<210> SEQ ID NO: 12
<211> LENGTH: 34
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer Hir2nd5' for the adding the signal sequence from a goat
beta-casein to the 5'-terminal of the hirudin gene.
<400> SEQUENCE: 12
tcatccttgc ctgtctggtg gctctggcca ttgc 34
<210> SEQ ID NO: 13
<211> LENGTH: 34
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Primer Hir3rd5' for adding the signal sequence from a goat
beta-casein to the 5'-terminal of the hirudin gene.
<400> SEQUENCE: 13
tcgctcgaga tgaaggtcct catccttgcc tgtc 34
<210> SEQ ID NO: 14
<211> LENGTH: 31
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence

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211 <220> FEATURE:
212 <223> OTHER INFORMATION: Primer Hir3'XhoI for adding the signal sequence from a goat
213 beta-casein to the 5'-terminal of the hirudin gene.
215 <400> SEQUENCE: 14
216 tcgctcgagt tattgcaggt attcttccgg g 31
219 <210> SEQ ID NO: 15
220 <211> LENGTH: 243
221 <212> TYPE: DNA
222 <213> ORGANISM: Hirudo medicinalis
225 <220> FEATURE:
226 <221> NAME/KEY: misc_feature
227 <223> OTHER INFORMATION: Sequence of hirudin gene from Genebank accession number of
228 M12693.
230 <400> SEQUENCE: 15
231 atgaaggtcc tcatccttgc ctgtctggtg gctctggcca ttgcagttgt ttacaccgac 60
233 tgcactgaat ccggtcagaa cctgtgcctg tgcgaaggct ctaacgtttg tggccagggc 120
235 aacaaatgca tcctgggctc tgacggcgaa aaaaatcaat gcgttactgg cgaaggtact 180
237 ccgaaaccgc agtctcacaa cgacggcgac tttgaagaaa tcccggaaga atacctgcaa 240
239 taa 243
242 <210> SEQ ID NO: 16
243 <211> LENGTH: 215
244 <212> TYPE: DNA
245 <213> ORGANISM: Hirudo medicinalis
248 <220> FEATURE:
249 <221> NAME/KEY: misc_feature
250 <223> OTHER INFORMATION: Nucleotide sequence of the full-length DNA fragment of the
251 complete coding sequence of hirudin.
253 <400> SEQUENCE: 16
254 gatcctttat ggttgtttac actgactgca ctgaatccgg tcagaacctg tgcctgtgcg 60
256 aaggctctaa cgtttgcggc cagggcaaca aatgcatcct gggctctaga ggcgaaaaaa 120
258 atcaatgcgt tactggcgaa ggtactccga aaccgcagtc tcacaacgac ggcgactttg 180
260 aagaaatccc ggaagaatac ctgcaataat agggc 215
263 <210> SEQ ID NO: 17
264 <211> LENGTH: 67
265 <212> TYPE: PRT
266 <213> ORGANISM: Hirudo medicinalis
269 <220> FEATURE:
270 <221> NAME/KEY: MISC_FEATURE
271 <223> OTHER INFORMATION: Amino acid sequence of the full-length DNA fragment of the
272 complete coding sequence of hirudin.
274 <400> SEQUENCE: 17
276 Met Val Val Tyr Thr Asp Cys Thr Glu Ser Gly Gln Asn Leu Cys Leu
277 1 5 10 15
280 Cys Glu Gly Ser Asn Asn Val Cys Gly Gln Gly Asn Lys Cys Ile Leu
281 20 25 30
284 Gly Ser Arg Gly Glu Lys Asn Gln Cys Val Thr Gly Glu Gly Thr Pro
285 35 40 45
288 Lys Pro Gln Ser His Asn Asp Gly Asp Phe Glu Glu Ile Pro Glu Glu
289 50 55 60

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292 Tyr Leu Gln
293 65
296 <210> SEQ ID NO: 18
297 <211> LENGTH: 24
298 <212> TYPE: DNA
299 <213> ORGANISM: Artificial Sequence
301 <220> FEATURE:
302 <223> OTHER INFORMATION: Primer palphaLA-forward for transgene screened by PCR.
304 <400> SEQUENCE: 18
305 gcttcctaga accaacacta ccag 24
308 <210> SEQ ID NO: 19
309 <211> LENGTH: 21
310 <212> TYPE: DNA
311 <213> ORGANISM: Artificial Sequence
313 <220> FEATURE:
314 <223> OTHER INFORMATION: Primer palphaLA-Reverse for transgene screened by PCR.
316 <400> SEQUENCE: 19
317 gtcgccgtcg ttgtgagact g 21
320 <210> SEQ ID NO: 20
321 <211> LENGTH: 27
322 <212> TYPE: DNA
323 <213> ORGANISM: Artificial Sequence
325 <220> FEATURE:
326 <223> OTHER INFORMATION: Primer pBC1-Forward for transgene screened by PCR.
328 <400> SEQUENCE: 20
329 gattgacaag taatacgctg tttcctc 27
332 <210> SEQ ID NO: 21
333 <211> LENGTH: 26
334 <212> TYPE: DNA
335 <213> ORGANISM: Artificial Sequence
337 <220> FEATURE:
338 <223> OTHER INFORMATION: Primer pBC1-Reverse for transgene screened by PCR.
340 <400> SEQUENCE: 21
341 catcagaagt taaacagcac agttag 26

VERIFICATION SUMMARY DATE: 09/22/2006
PATENT APPLICATION: **US/10/727,145** TIME: 11:13:34

Input Set : **F:\031065SeqListing.txt**
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L:20 M:271 C: Current Filing Date differs, Replaced Current Filing Date